No 3. Prel.

Santa Rosa to Petaluma

via Cotati

March 1912

LEVEL BOOK

370

14.113.0148

KEUFFEL & ESSER CO.
DRAWING MATERIALS
AND
SURVEYING INSTRUMENTS.
NEW YORK.
CHICAGO. SAN FRANCISCO. ST. LOUIS

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING

ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.

FOR SINGLE TRACK EXCAVATION.

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	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

Index Page

Line "B'" Sta. 572+91 = 572+91 "B'"

to Sta. 628+32.6 p.p. 1-9

Line "B'" Intersects p.s. Ruby N. of Denman Station.

"L" Line 6+87.2 - 225+11.6 p.p. 10 - 26

"D" " 421+75.8 - 618+00 " 27 - 37

Continued on page 46 - Transit Book #2

Line B Sta 572+91 =

	0.89	129.12		128.23
572+91A			1.4	127.7
573			1.9	127.2
4			3.6	125.5
5			10.0	119.1
6			11.6	117.5
J.P.	3.54	121.69	10.97	118.15
7			6.4	115.3
A82.7			6.8	112.9
576			6.1	115.6
9			3.x	115.5
+60			3.x	118.3
+85			3.0	118.7
580			3.1	118.6
+40			1.9	119.8
J.P.	8.08	127.40	2.37	119.32
581			6.x	121.x

5-72+91B Mch 22-1912

Stake in fence line Left of 574B

Top Sta 576

Cent Road

Top 580

		127.40		
58 v			1.3	126.1
T.P.	9.30	134.17	2.53	124.87
3			5.2	129.0
+62 3			4.3	129.9
4			3.0	131.2
+20			2.5	131.7
+85 8 Δ			3.2	131.0
5			3.2	131.0
6			3.6	130.6
	1.52	126.93	8.76	125.41
7			1.0	125.9
8			6.0	120.9
9			9.0	117.9
590.			12.4	114.5
T.P.	0.20	115.50	11.63	115.30
+31			2.8	112.7
+			8.2	~~107.2~~
T.P.	3.51	110.25	8.76	106.74

Cut Road

Top Sta 590

on Hub 591+08.6

		110.25		
591			1.5	108.8
+50			5.3	105.0
+75			15.6	94.7
2			7.9	102.4
J.P	2.83	105.61	7.47	102.78
+25			7.8	97.8
+34			2.5	103.1
+41 6			4.0	101.6
+65			12.6	93.0
+80			13.0	92.6
3			5.1	100.5
+1			3.7	101.9
4			5.6	100.0
+75			9.4	96.2
+85			11.3	94.3
5			12.6	93.0
J.P	0.60	94.14	1207	93.54

center of creek

Jn 592

Jn 595

595		94.14		
+10			4.4	89.7
+30			4.6	89.5
+			18.0	76.1
+50			1.6	92.5
6			8.6	85.5
+12			5.7	88.4
+40			4.3	89.8
7			3.7	90.4
+50			4.0	90.1
8			5.7	88.4
+74			11.2	82.9
J.P.	1.28	94.95	10.47	83.67
9			5.0	79.9
			20.0	64.9
+95			12.8	72.1
J.P.	1.28	73.93	12.30	72.65
600			3.5	70.4

30 ft. to right in center of creek

J of 598+74

100 ft to right in center of creek.

on stake at 599+95.

600	73.93		
+25		10.3	63.6
+40		8.5	65.4
+52		4.5	69.4
+70		5.1	68.8
+80		9.7	64.2
+90		13.4	60.5
1		6.4	67.5
+15		9.4	64.5
+30		10.6	63.3
+45		13.3	60.6
+60		13.1	60.8
+75		8.6	65.3
+80		4.4	69.5
2		4.1	69.8
+10		7.1	66.8
+35		11.6	62.3
+60		8.4	65.5

602		73.93		
+70			5.0	68.9
3			5.6	68.3
4			11.0	62.9
J.P.	0.87	64.52	10.28	63.65
+495			3.8	60.7
5			4.9	59.6
6			7.4	57.1
7			10.4	54.1
+107			10.4	54.1
J.P.	1.26	56.35	9.43	55.09
8			5.8	50.5
9			8.0	48.3
+50			8.1	48.2
+60			13.6	42.7
+70			15.4	40.9
+85			13.0	43 3
610			11.7	45.6

Jop 604

Jop 607+107

center of creek

610		56.35		
1			12.9	43.4
J.P.	2.09	46.18	12.26	44.09
+157			3.3	42.9
+50			4.2	42.0
2			3.7	42.5
+30			4.5	41.7
+50			7.8	38.4
+80			5.2	41.0
3			5.5	40.7
4			9.7	36.5
+20			8.2	38.0
5			10.2	36.0
J.P.	2.00	38.59	9.59	36.59
6			4.2	34.4
7			5.2	33.4
8			5.9	32.7
9			7.2	31.4

D of 611

center of road

D of 615

619		38.59		
+56 △			9.5	31.1
620			6.0	30.6
J.P.	3.31	34.64	7.26	31.33
1			4.6	30.0
+601 △			5.1	29.5
2			5.3	29.3
3			6.0	28.6
			4.27	30.37
4			6.4	28.2
J.P.	4.20	33.33	5.51	29.13
+752			4.8	28.5
5			5.1	28.2
6			5.5	27.8
			3.10	30.23
7			2.1	31.2
8			1.6	31.7
+326			1.7	31.6

Top 620

elev on Br. #12 on S.W. cor.

Top 624

elev on Br #11 S.W. cor

on top of rail.
Top rail at P.I. with Track.

629		33.33		
629			1.8	31.5
	3.33	34.79	1.87	31.46
630			3.4	31.4
1			3.5	31.3
2			3.6	31.2
3			3.5	31.3
4			3.5	31.3
5			3.5	31.3
6			3.6	31.2
	3.24	34.43	3.60	31.19
7			3.3	31.1
+287			3.3	31.1
			4.92	29.51

Top rail

Top rail
Top rail
Top rail
Top rail
Top rail
Top rail
Top rail
Top rail
Top rail
Top rail at P.I.
Elev. on S.W. Cor. Brg #10 (Line "B'")

June 13 - 1912 Line K

BM.	2.55	145.746		143.196
6+87.2 BC			2.9	142.8
7+77.2 CC			10.7	135.0
8			10.5	135.2
9			8.7	137.0
+66			11.9	133.8
	1.13	144.32		143.196
10			10.0	134.2
+05			9.0	135.3
+06			6.1	138.2
			4.3	140.0
			3.4	140.9
			4.4	139.9
			4.8	139.5
+71			6.2	138.1
11			7.6	136.7
11+72.2 8 CC			8.9	135.4
12+62.2 8 EC			10.4	133.9

Pig at north gate post abt 65' L Sta 11 - See Page 3 No. 1
Boyd Street Santa Rosa

29
Curb 43
Curb 62
Curb 80.4
Fence 94

East line St.

Curb

Cent St.

Curb

West line St.

		1443?			
13			11.0	133.3	
14			10.8	133.5	
15			10.2	134.1	
+1.0			9.5	134.8	
16			3.9	140.4	
J.P. +60'			5.3	139.7	
	3.68	145.06	2.94	141.38	
+90			5.4	139.6	
17			8.1	137.0	
			6.4	138.6	
+27			2.1	143.0	
+60			0.83	144.13	
+70			2.1	143.0	
+85			2.9	142.1	
18			5.8	139.2	
+053			5.9	139.2	
+85			7.8	137.2	
19			10.0	135.0	
+20			7.9	137.1	

L Line 6/13-12

+0 x x Fence

E R O W. Prop +15 N W Pac

Top Rail N W Pac Sta +60 Cent N. W. Pac RR

West R O W. Fence

		145.06		
19+75			11.6	133.4
20			11.8	133.2
+35			8.7	136.8
21			8.0	137.0
I.P.	2.28	141.39	5.95	139.11
22			4.5	136.9
+89			4.3	137.1
+97			5.7	135.7
23			4.9	136.5
BC +165			5.3	136.1
+45			5.7	135.7
I.P.	5.33	139.74	6.98	132.41
24 CC+06			9.7	130.0
+20			13.7	126.0
25			13.2	126.5
+55			8.1	131.6
+80			9.9	129.8
26			5.6	134.1

L Line 6/13-12

x 7 Ence

Sta 23-to BC mariced 23+16.63 = 32.7 ft.

Bottom gulch

" "

		139.74		
26+20			3.4	136.3
+45			4.3	135.4
+80			10.7	129.0
27			8.1	131.6
+10			9.3	130.4
+30			4.7	135.0
B.M.	4.60	135.36	8.98	130.76
28			1.0	134.4
+20			4.7	130.7
29			5.8	129.6
+15			6.3	129.1
+35			3.3	132.0
	4.39	139.61	0.14	135.22
30			5.9	133.7
31			7.0	132.6
+06			8.7	130.9
+15			4.5	134.8
+85			4.6	135.0
+35			4.9	134.8

on old P. J. Hub in fence line 28+50
South McManus Barn abt 45 ft.

+or 7 Fnce

East Road ditch

East Edge Road

Center Road

West Edge Road

		139.61		
31+85		7.7	7.9	131.7
+87		6.9	6.9	132.7
~~37~~ +63.3 C.C.		6.6	6.6	133.0
		4.0	4.0	135.6
		3.6	3.6	136.0
		3.8	3.8	135.8
		4.8	4.8	134.8
		5.0	5.0	134.6
		4.8	4.8	134.8
		3.7	3.7	135.9
		2.7	2.7	136.9
B.M.		6.26	6.26	133.35
32+53.3 E.C.		8.4	8.4	131.2
33		9.8	9.8	129.8
+25		11.8	11.8	127.8
+50		16.8	16.8	122.8
34		7.0	7.0	132.6
T.P.	225	134.15	7.71	131.90

L Line 6/13-12

West side road ditch

100 ft north x Road (in center)

200 " " " "

300 " " " "

35 " South " " = N. End Bridge

110 " " " = S " "

200 " " "

300 " " "

400 " " "

ch on peg at fence post west side Dutton ave

near South end Bridge = 133.35 / 133.28 / .07

See Page 15 Book 1

Cut Creek

Hub Sta 34+10 prox

		~~139.61~~ 134.15			
35			2.5	131.6	
36			2.8	131.3	
+54			3.0	131.1	
37			3.5	130.6	
38			4.1	130.0	
39			5.4	128.7	
40			5.8	128.3	
2R.	4.71	133.86	5.00	129.15	
41			8.0	125.8	
+68½ BC.			8.2	125.6	
+90			7.5	126.3	
+97			4.0	129.8	
42			3.8	130.0	
+08			3.8	130.0	
+20			9.9	124.0	
+29			9.7	124.6	
			11.3	122.5	
42+58½	CC		8.7	125.1	
43+98			7.7	126.2	

L Line 6-13-12

Line bet Hanson & Masquart

Elevations along Center Road N & S.

Top Sta 40

						Elev.
16'	North	from Sta	42 = Cent	Br.	3.5	130.3
100	"	"	"	"	3.9	129.9
200	"	"	"	"	3.3	130.5
300	"	"	"	"	3.4	130.4
100	South	"	"	42	3.9	130.0
200	"	"	"	"	3.6	130.2
300					2.8	131.0
400					2.0	131.8

west fence line

Elev. ground below Bridge

		133.86		
43+58.6			7.6	126.2
44+58.6			7.8	126.0
TP.	33.4	130.71	6.99	126.87
45+58.6			9.3	120.9
46+58.6			9.9	120.3
47+58.6			7.5	122.7
48+58.6			10.9	119.3
+80			4.0	126.2
49+58.6			3.3	126.9
50+58.6			3.3	126.9
TP.	28.2	130.59	2.44	127.77
51+03			4.4	126.2
51+40			11.7	118.9
51+58.6			8.3	122.3
51+73			5.0	125.6
52+58.6			4.4	126.2
53+58.6			4.3	126.3
54+58.6			5.2	125.4

L Line 6-13-12 16

J1-

58
45
103

Bottom crack

" "

8'L " "

" "

Top sta 50+58.6

Cut crack

		130.59		
T.P. 1	1.75	128.13	4.21	126.38
55+58½			3.7	124.4
56+58½			4.2	123.9
57+58½			4.8	123.3
58+58½			5.7	122.4
59+58½			6.7	121.4
59+95 68	CC		6.1	122.0
60+85 68	E.C.		5.8	122.3
B.M.	1.80	124.89	5.86	123.09
60+95			2.9	122.0
61			6.7	118.2
+10			2.4	122.5
62			3.6	121.4
63			3.3	121.6
64			4.8	120.1
65			4.8	120.1
66			4.6	120.3
67			4.7	120.2

Line L

50' L Sta 60+92.8 South side fence

		124.89		
68			5.0	119.9
JP.	3.40	124.19	4.10	120.79
69			4.4	119.8
70			4.8	119.4
71			4.9	119.3
72			5.2	119.0
73			5.4	118.8
74			5.7	118.5
75			6.2	118.0
JP.	4.01	122.86	5.34	118.85
76			5.2	117.6
77			5.0	117.8
78			6.2	116.6
+60			4.5	118.3
79			5.1	117.7
80			6.2	116.6
81			6.6	116.2
82			7.0	115.8
JP.	2.60	119.27	6.19	116.67
83			3.7	115.6
84			4.8	114.5

Line 2

Top Sta 68

Top Sta 75

Top Sta 82

		119.27			
85			5.2	114.0	
86			5.3	114.0	
87			5.8	113.5	
B.M., +178.4 △	3.56	117.68	5.15	114.12	
			3.7	114.0	
88			4.4	113.3	
89			5.0	112.7	
90			5.0	112.7	
91			4.8	112.9	
92			5.0	112.7	
93			5.6	112.1	
94			6.6	111.0	
T.P. 1	2.13	114.12	5.69	111.99	
95			4.1	110.0	
96			4.6	109.5	
97			4.8	109.3	
98			5.0	109.1	
99			5.2	108.9	
100			5.3	108.8	

Line L

Pg 2nd post West Sta 87

Top Sta 94

		114.12			
101			5.6	108.5	39
102			6.1	108.0	45
	3.90	112.47	5.55	108.57	
+50			3.4	109.0	
103			3.8	108.7	
+75			5.1	107.4	
104			4.4	108.0	
105			4.5	108.0	
106			4.6	107.9	
+39 3/5			4.8	107.7	
+42			5.5	107.0	
+46			4.4	108.0	
107			5.1	107.4	
108			5.7	106.7	
+53 5/5			5.8	106.6	
109			6.2	106.2	
+75			6.8	105.7	
110			5.9	106.6	
111			6.9	105.6	
	3.57	110.04	6.00	106.47	
112			4.7	105.3	
113			4.9	105.1	
+36 3/5			4.7	105.3	
114			4.7	105.3	
115			4.9	105.1	
+10.1			4.8	105.2	
+60			4.5	105.5	
+75			4.3	105.7	

36 8 Line 3/2 8.6

Ch or peg = 108.60 at fence post Sta 95+33 N° 1 Pree
Page 34 Same bring 5' R Sta 102+04.5
June 25 - 1912

x Ditch West

TP. Top Sta 111

		110.04 ✓		
116			4.9	105.1
117			5.6	104.4
+50			5.5	104.5
118			4.3	105.7
+50			5.8	104.2
119		✓	5.4	104.6
TP.	357 ✓	109.00	4.52	105.48 ✓
+84			4.2	104.8
120			4.3	104.7
121			4.3	104.7
122			4.8	104.2
123			4.9	104.1
124			5.1	103.9
125			5.4	103.6
126			5.7	103.3
+245			5.8	103.2
127			6.0	103.0
+56			6.2	102.8
128		✓	6.4	102.6
TP.	365	107.01	5.64	103.36 ✓
129			4.6	102.4
+25			4.0	103.0
130			4.5	102.5
131			4.9	102.1
132			4.9	102.1
+59			3.9	103.1
+65			6.9	100.1
+70			9.8	97.2
+76			5.2	101.8
+81			3.8	103.2
+86			3.6	103.4
+90			3.9	103.1
133			5.1	101.9
+09		✓	3.8	103.2
B.M.	288	106.45	3.44	103.57 ✓

Line L

Top Sta 119

Top sta 128

Bottom Ditch 123
119
.4 = fall ditch 400 ft.

Cent Road
Great Western Power Co. Pole hole 60' L 132+56
cent Ditch (change culvert x Road to L of Line
Top old peg Line A Page 37 No 1 Prel. at 126+39 = 103 77
about 24 L Sta 133+09

		106.45		
134			4.7	101.7
135			5.1	101.4
136			4.9	101.5
137			4.9	101.5
+43			5.0	101.4
138			4.9	101.5
+56			5.1	101.4
139			5.0	101.5
140			4.5	102.0
+50			5.7	100.7
+90			5.9	100.5
141			5.2	101.2
+12			4.8	101.6
+60			4.8	101.6
142			5.0	101.5
TP.	241	104.59	4.27	102.18
143			3.6	101.0
+70			4.5	100.1
144			4.5	100.1
+50			4.3	100.3
145			5.9	98.7
+15			6.7	97.9
+30			5.3	99.3
146			5.9	98.7
+23			5.7	98.9
+26			4.8	99.8
B.M.			4.85	99.74
147			4.4	100.2
148			5.3	99.3
+50			6.0	98.6
149			5.2	99.4
+30			5.1	99.5
+70			6.5	98.1
150			6.2	98.4
TP.	243	101.72	5.30	99.29
+70			4.7	97.0

Line L

Top sta 142

old slough

Ch T.P. P38 No 1 Prel = 100.00 at 139+571 = 20' L 146+26

Top sta 150

		101.72		
151			3.9	97.8
+15			3.6	98.1
152			3.8	97.9
+80			4.1	97.6
153			3.2	98.5
+20			2.5	99.2
154			4.1	97.6
+50			5.0	96.7
155			4.9	96.8
156			4.9	96.8
157			4.9	96.8
158			5.0	96.7
159			5.1	96.6
B.M.	3.64	101.46	3.90	97.82
+54			4.7	96.7
+60			5.5	96.0
+64'			4.1	97.4
160			4.8	96.7
161			4.6	96.9
162			4.7	96.8
+85			6.2	95.3
163			6.1	95.4
+50			5.4	96.1
164			5.2	96.3
165			6.0	95.5
+50			5.1	96.4
166			5.9	95.6
+05½			6.2	95.3
167			6.4	95.1
T.P.	2.51	98.57	5.40	96.06
168			3.8	94.8
169			4.0	94.6
170			3.7	94.9
+40			2.7	95.9
171			4.9	93.7
172			5.1	93.5
173			5.0	93.6

Line L

Top old + Stu 15' L 159+64 L

Ditch west

Slough S.W.

Top 167

		98.87			
174			4.9	93.7	
175			4.8	93.8	
176			5.1	93.5	
177			5.5	93.2	
178			5.6	93.0	
2 P.	3.48	97.43	4.62	93.95	
+50			5.1	92.3	
179			4.4	93.0	
+50			5.0	92.4	
+80			5.8	91.6	
180			5.2	92.2	
+50			3.7	93.7	
181			4.5	92.9	
+50			5.8	91.6	
182			5.5	91.9	
+50			4.7	92.7	
183			5.1	92.3	
+50			5.6	91.8	
184			4.8	92.6	
+50			6.3	91.1	
185			6.1	91.3	
186			5.6	91.8	
B.M.	4.27	98.10	3.60	93.83	
+09			6.1	92.0	
+13			7.0	91.1	
+25			5.3	92.8	
+38			7.1	91.0	
+482			6.2	91.9	
187			6.4	91.7	
188			5.3	92.8	
+30			7.0	91.1	
189			5.3	92.8	
+50			6.4	91.7	
190			6.4	91.7	
+35			5.1	93.0	
191			6.7	91.4	

Line L

Top Sta 178

Check P 42 No 1 Prel. Top of sub div post north side
Road = Elev. 93.96 Bearing 63 R. Sta 186+09.3
In Ditch N side Road Todd school
Cent Road
In Ditch South side Road
South line Road

		98.10		
192			6.8	91.3
+50			7.0	91.1
193			5.7	92.4
+50			5.8	92.3
194			5.9	92.2
195			7.5	90.6
B.M.	5.09	96.59	6.60	91.50
196			5.8	90.8
+60			6.1	90.5
197			5.2	91.4
+50			5.7	90.9
198			6.4	90.2
+26			7.6	89.0
199			5.1	91.5
200			5.3	91.3
+69			5.7	90.9
201			5.9	90.7
202			7.2	89.4
+50			7.7	88.9
203			6.0	90.6
	1.42	93.66	4.35	92.24
+14			3.1	90.6
204			4.2	89.5
205+09 BC			5.1	88.6
205+69 CC			5.1	88.6
206			5.2	88.5
207			5.0	88.7
208			5.1	88.6
209			5.2	88.5
210			5.1	88.6
211			5.1	88.6
212			5.0	88.7
+76 CC			4.9	88.8
213+36 EC			5.0	88.7
B.M.	5.52	94.56	4.62	89.04

Line L

9366
434 25
89.28

Top Sta 195

Ch. P. 43 No 1 Prel Top 4x4 Post = Elev. 92.35
4 ft L 203+142

On Hub E.C. 213+368

		94.56'			
214			5.7	88.9	
215			6.0	88.6	
+50			5.9	88.7	
216			5.7	89.4	
+50			6.3	88.3	
217			5.6	89.0	
+60			6.0	88.6	
218			5.6	89.0	
+50			4.4	90.2	
219			4.8	89.8	
220			5.1	89.5	
+50			5.0	89.6	
221			5.0	89.6	
+30			4.3	90.3	
222			5.3	89.3	
223			5.4	89.2	
+58.2			5.2	89.4	
224			5.6	89.0	
225			6.6	88.0	
+11.6			5.9	88.7	
P.I.			5.05	89.51	

Line L

x 7 Ence Int

M + S 7 Ence
Top 225+11b

Line L From Cotiti Road

	4.32	106.12		101.80
421+75.8			4.7	101.4
+81			6.6	99.5
422			3.8	102.3
+15			6.5	99.6
23			5.5	100.6
+40			5.1	101.0
+90			5.8	100.3
424			6.0	100.1
+25			7.1	99.0
+70			8.4	97.7
+75			6.1	100.0
425			5.3	100.8
+50			4.8	101.3
+89.9			5.4	100.7
426			5.5	100.6
+50			5.5	100.6
+75.2			4.8	101.3
427+24.3			4.2	101.9
+54.8			4.5	101.6
428		✓	4.3	101.8
	5.00	107.73	3.39	102.73
429			6.8	100.9
430			5.7	102.0
+75			6.3	101.4
431 = 431 Line II			5.7	102.0
432			4.9	102.8
+60			6.3	101.4
433			4.5	103.2
+40			4.7	103.0
+70			3.0	104.7
434			4.2	103.5
+30			6.1	101.6
435			4.7	103.0
+50			4.9	102.8
436		✓	4.7	103.0
	5.48	109.45	3.76	103.97

Top guard stake 418+91½ Line A Page 12 Book 9

Cut. Road

Bottom Ditch
" X "

Top Slope 428

		109.40			
436+65			6.3	103.1	
+93.3			6.7	102.7	
437			6.7	102.7	
+50			7.4	102.0	
438			7.2	102.2	
+50			6.2	103.2	
439			5.7	103.7	
+30			5.7	103.7	
+81.3			4.7	104.7	
440			5.0	104.4	
+50			3.9	105.5	
441			3.7	105.7	
+50			3.7	105.7	
442			4.5	105.0	
443			4.7	104.7	
+50			5.1	104.3	
444			4.4	105.9	
	6.73	112.89	3.29	106.16	
+30			6.6	106.3	
+70			9.4	103.5	
445			7.8	105.1	
+50			5.0	107.9	
446			7.3	105.6	
447			7.6	105.3	
+60			7.6	105.3	
448			5.6	107.3	
+50			7.6	105.3	
449			6.6	106.3	
+35			3.5	109.4	
+70			6.6	106.3	
450			5.8	107.1	
+12			7.4	105.5	
+50			5.2	107.7	
451			2.8	110.1	
+50			4.5	108.4	
452			6.0	106.9	
+50			6.1	106.8	

Line D

Slough

Fence

Job 4444

Cut Road

		112.89			
453			6.0	106.9	
454		✓	5.8	107.1	
	665	114.42	5.12	107.77	
+50			7.1	107.3	
+80			6.3	108.1	
455			7.3	107.1	
456			7.2	107.2	
457			7.0	107.4	
458			6.4	108.0	
+25			6.0	108.4	
+40			2.5	111.9	
459			5.9	108.5	
460			5.6	108.8	
461			5.2	109.2	
+50			5.8	108.6	
462			2.4	112.0	
+50			2.5	111.9	
+65			4.8	109.6	
463			4.9	109.5	
+50			4.7	109.7	
+70			3.1	111.3	
464		✓	4.5	109.9	
	586	116.93	3.35	111.07	
+50			7.1	109.8	
465			4.3	112.6	
+50			4.3	112.6	
466			5.7	111.2	
+50			3.7	113.2	
467			8.3	108.6	
+60			6.5	110.4	
+85			3.4	113.5	
468			5.1	111.8	
+15			7.7	109.2	
+40			7.4	109.5	
+95			4.5	112.4	
469			3.9	113.0	
+65			5.5	111.4	

Line D

Jos 454

Jos 464

		116.93 ✓		
470			2.7	114.2
+60			6.3	110.6
471			5.6	111.3
+20			6.6	110.3
+50			4.0	112.9
+91			4.6	112.3
BM	484	117.69 ✓	4.28	112.65
472			4.3	113.2
+50			5.1	112.4
+90			2.9	114.6
473			4.0	113.5
+50			5.8	111.7
+80			2.8	114.7
474			3.8	113.7
+20			6.6	110.9
+50			6.9	110.6
475			6.7	110.8
+50			5.6	111.9
+70			2.3	115.2
476			5.4	112.1
+30			6.7	110.8
+75			6.3	111.2
477			5.1	112.4
+30			2.6	114.9
+50			4.1	113.4
+85			3.3	114.2
478			4.2	113.3
+50			6.7	110.8
479			4.9	112.6
+30			2.3	115.2
480			5.9	111.6
+50			4.8	112.7
481			6.1	111.4
+30			6.7	111.3
482		✓	5.7	112.3
	6.35	119.69	4.15	113.34
+50			5.5	114.2
+90			4.1	115.6

Line D

Cent Road

On Hub 471+90.9

P.I. Sta 482+02.3

		119.69		
483			4.9	114.8
+50			6.6	113.1
484			5.9	113.8
+29.7			4.5	115.2
+75			4.6	115.1
485			6.2	113.5
+50			7.2	112.5
486			5.0	114.7
487			5.3	114.4
+90			6.2	113.5
488			5.6	114.1
+90			5.8	113.9
489			5.8	113.9
490			6.8	112.9
	6.70	120.14	6.25	113.44
491			7.6	112.5
492			6.7	113.4
+99.5			6.6	113.5
493+20			7.8	112.3
+50			6.0	114.1
+80			7.6	112.5
494			7.0	113.1
495			7.6	112.5
	2.97	116.50	6.55	113.59
+50			4.2	112.3
496			3.4	113.1
+50			4.1	112.4
497			4.6	112.0
498			5.6	111.0
499			6.2	110.3
+50			8.0	108.5
5+85			7.0	109.5
500			8.0	108.5
+26			8.6	108.0
+40			11.9	104.6
+50			7.9	108.8

Line D

Cutler Road

I.P. top 490

Cut Road

I.P. Top 495

Bolton Ditch

		116.56		
501			8.8	107.8
502			8.2	108.4
	7.61	116.92	7.25	109.31
503			5.5	111.4
504			4.7	112.2
+64			6.4	110.5
505			6.2	110.7
+90			5.6	111.3
506			4.7	112.2
+16			5.6	111.3
+60			3.9	113.0
507			3.4	113.5
508			4.5	112.4
509			6.7	108.2
+773			12.5	104.4
	0.35	106.08	11.19	105.73
510			2.8	103.3
511			5.5	100.6
+976			7.7	98.4
512			7.6	98.5
			5.4	100.7
+778			9.1	97.0
513			9.9	96.2
514			10.8	95.3
515			11.8	94.3
+163			12.0	94.1
	0.57	95.68	10.97	95.11
515+637			2.6	93.1
516			3.8	91.9
+50			5.4	90.3
517			4.8	90.9
+20			3.7	92.0
+75			5.0	90.7
518			5.4	90.3
+50			5.3	90.4
+70			8.6	87.1
+85			11.6	84.1

Line D

I.P. Top Sta 502

Ground x Road + RR. 1/4 mile East 493 = 115.

I.P. Top 509+77 3

Top Rail N.W.P. opposite 512

I.P. Top 515+16 3

Top Rail opp. 519 = 95.2

		95.68		
519			8.7	87.5
+12			8.0	87.9
+46			5.6	90.1
	235	93.35	4.68	91.00
+70			3.3	90.0
+85			7.8	85.5
520			6.8	86.5
+25			3.1	90.2
521			4.3	89.0
522			5.0	88.3
523			4.4	88.9
+691			2.1	91.2
524			2.2	91.2
+75			2.1	91.2
525			4.1	89.2
526			8.6	84.7
	275	88.55	7.55	85.80
+983			3.5	85.0
528			5.4	83.1
529			5.4	83.2
530			5.6	83.0
531			5.4	83.1
532			3.8	84.8
533			4.6	84.0
	438	88.34	4.39	83.96
534			4.4	83.9
535			4.4	83.9
536			3.9	84.4
			3.25	85.09
538+082			10.7	77.6
+50			11.0	77.3
+75			19.3	69.0
+80			11.3	77.0
539			11.6	76.7
540			11.7	76.6
541			13.1	75.2
	512	81.44	12.02	76.32

Line D

I.P. top 519+44.6
Creek

93 = top rail opp 523

527 - 536 Inside R O W Fence N W. P

I.P. Opp 533 Creek cuts to Cut Line

B.M. Hub at N E Cor Andreasons inside R O W
Creek

Divert Creek to R

I.P. top Sta 541

		81.44			
541+60			8.2	73.2	
+75			6.1	75.3	
+85			12.7	68.7	
542			13.2	68.2	
+15			7.6	73.8	
+25			5.6	75.8	
543			5.5	76.0	
544			2.1	79.3	
+50			1.2	80.2	
545			1.6	79.8	
+38.7			2.9	78.5	
+69.2			3.9	77.5	
546			4.7	76.7	
+50			6.3	75.1	
547			7.7	73.7	
	0.49	75.13	6.80	74.64	
548			2.2	72.9	
+83			4.0	71.1	
549+1373			4.3	70.8	
550			4.8	70.3	
551			5.2	69.9	
552			5.4	70.7	
553			6.3	68.8	
+337			6.5	68.6	
554			7.5	67.6	
+381			8.1	67.0	
555+687			8.1	67.0	
	3.67	71.51	7.29	67.84	
556			2.8	68.7	
557			4.4	67.1	
558			4.8	66.7	
+891			5.1	66.4	
559			5.8	65.7	
+25			4.5	67.0	
+527			5.1	66.4	
560			6.6	64.9	
561			6.1	65.4	

Line D

Creek
Top Rail opp. 542 = 81.4

T.P. top 547

T.P. top + 682

Cent Road Top Rail = 71.7

		71.51		
562			6.7	64.8
563			8.3	63.2
564			8.3	63.2
565			8.8	62.7
566			9.2	62.3
+388			8.9	62.6
	2.01	65.70	7.82	63.69
			1.85	63.85
566+70			5.3	60.4
+75			10.0	55.7
+94			4.6	61.1
567			3.6	62.1
+76			4.2	61.5
568			4.6	61.1
569			5.5	60.2
570			5.2	60.5
571			5.3	60.4
572			6.2	59.5
573			7.4	58.3
+20			7.0	58.7
+30			11.4	54.3
574			10.7	55.0
+06			7.5	58.2
575			7.9	57.8
576			8.0	57.7
	3.56	67.13	7.13	58.57
577			5.0	57.1
+876			5.3	56.8
578			2.9	59.2
+25			1.7	60.4
+763			3.9	58.2
	-.006	60.02	2.06	59.07

Line D

-

T.P. top 566 + 38.8

Check → Top 560 + 23 Line C = 63.76

See Page 47 # 2 Prel

Durst Creek R

Creek

Cut Road

		60.07		
579+59.9			4.6	55.4
580			4.9	55.1
+50			5.0	55.0
581			5.0	55.0
582+12.7			4.1	55.9
+37			4.4	55.6
583			3.6	56.4
+50			4.4	55.6
584			3.2	56.8
+50			4.5	55.5
585			4.3	55.7
+80			3.4	56.6
586			3.6	56.4
+50			4.1	55.9
587			5.7	54.3
588			7.7	52.3
589			7.5	52.5
	1.16	54.64	6.53	53.49
590			2.7	51.9
+50			3.0	51.6
591			2.8	51.8
+50			4.2	50.4
592			4.2	50.4
593			4.4	50.2
+50			4.7	49.9
+80			4.0	50.6
+86			5.4	49.2
+92			8.6	45.8
594			13.0	41.6
+20			3.8	50.8
+85			3.4	51.2
595			3.8	50.8
596			11.6	43.0
+80			7.6	47.0
597			6.7	47.9
+85			12.5	42.1

Line D

490
170
960

T.P. to ~~Sta 589~~ Guard 2' R 584

Cut Creek D 41 N W Pac 12' Spring 3 Bent
Divert Creek R

		54.6		
598			8.8	45.8
+10			4.4	50.2
599			5.1	49.5
	1.97	55.65	3.96	50.68
B.M.			2.45	50.20
600			3.2	49.4
601			3.3	49.3
602			3.6	49.0
603			4.2	48.4
+50			4.8	47.8
+75			8.3	44.3
604			5.7	46.9
+50			5.1	47.5
605			5.9	46.7
+40			6.6	46.0
+50			9.6	43.0
+75			15.0	37.6
606			10.7	41.9
+10			9.0	43.6
+50			6.9	45.7
+75			9.7	42.9
607			5.5	47.1
+50			5.2	47.4
608			12.3	40.3
609			13.3	39.3
+50			5.9	46.7
610			6.1	46.5
B.M.	3.57	50.57	5.65	47.00
611			3.9	46.7
612			4.0	46.6
613			4.4	46.2
614			4.8	45.8
615			5.2	45.4
616			5.6	45.0
617			5.7	44.9
+692			6.2	44.4
618			6.6	44.0

IP. top 599
B.M. on Hub 599+80 8

Divert Creek R

Creek

top Sta 610+08 9

Continued Page 46 Transit Book #2

570
102.04
9533
671

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES $1\frac{1}{2}$ TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.